7020
Ex 84-2871/1

ROUTING AND RECORD SHEET

SUBJECT: (Optional)
Panel for CIA Computer Study

FROM:
Harry E. Fitzwater
Deputy Director for Administration
7D 24 Hqs

STAT

EXTENSION

NO. DDA 84-2898/1

DATE 26 September 1984

TO: (Officer designation, room number, and building)	DATE RECEIVED	DATE FORWARDED	OFFICER'S INITIALS	COMMENTS (Number each comment to show from whom to whom. Draw a line across column after each comment.)
1. Acting DCI 7D 6011 Hqs				John, The attached represents my best effort at drafting a guidance paper for the proposed computer panel. I have coordinated it with the ExDir-he concurs. STAT [ ] has agreed to chair the panel. Does this meet with your approval? Harry Attachment: As stated
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STAT DDA/HEFitzwater:kmg [ ] (26Sept84)
Distribution:
Orig PRS - ADCI w/Att (by hand)
1 - ER w/cy Att (by hand)
1 - DDA Subj w/cy Att
1 - DDA Chrono w/cy Att
1 - HEF Chrono w/cy Att

DCI EXEC REG

FORM 1-79 **610** USE PREVIOUS EDITIONS

GPO : 1983 O - 411-632

C-106

PANEL FOR CIA COMPUTER STUDY

I. Objective. The Panel's principal objective is to determine the most feasible and cost-effective method to prevent the continuing displacement of personnel in the Headquarters Buildings by machines. This includes the new building currently planned for occupancy in the summer of 1987.

II. Deliverables. At least three options are required. The Panel is urged to use its own judgment on option selections. Possible options include but not limited to the following:

A. Move all computers and storage devices to an outlying building. This could include construction or leasing of a building either new or renovated.

B. Contracting for provision of computer services.

C. Management system that controls growth of applications in consonance with shrinking technology (do not let equipment outgrow the floor space).

D. Management system that controls the data stored (and hence the space devoted to storage).

III. Considerations. In accomplishing this study, the Panel should consider the following in its study for options A and B:

A. Security - The impact risk and costs of providing (1) physical protection for a remote site and its communication network, (2) meeting COMSEC requirements for the facility and its communication, and (3) in isolating data bases from the rest of the Agency.

B. Communications - The impact on resources (costs) and technical feasibility of communicating at the speeds and reliability required by the Agency.

C. Size - The study shall be based on a facility that will have the capacity to absorb growth of machines and necessary supporting personnel to meet Agency computing needs through the year 2000.

D. Cost - The Panel is requested to provide budgetary estimates.

IV. Support. Staff support will be provided in the following disciplines:

- Panel Executive Secretary (Dean Brown, DDA)
- Logistics
- Communications
- Data Processing

V. Panel Membership:

STAT

VI. Report Date:

A. Preliminary Report - 1 December 1984

B. Final Report - 15 December 1984

ROUTING AND RECORD SHEET

SUBJECT: (Optional) Att. ER81-9020 ER84-8071+1

FROM: Executive Director

STAT

EXTENSION

NO.

DATE 19 September 84

TO: (Officer designation, room number, and building)	DATE RECEIVED	DATE FORWARDED	OFFICER'S INITIALS	COMMENTS (Number each comment to show from whom to whom. Draw a line across column after each comment.)
1. DDCI	21 SEP 1984			Bill I BELIEVE IN A VERY FLEXIBLE POLICY TO COMPUTERS TO TAKE ADVANTAGE OF THE VERY FAST MOVING TECHNOLOGY THRU AMPLE USE OF PERSONAL COMPUTERS RATHER THAN LOCKING OURSELVES TO LARGE MAINFRAMES THAT BECOME OBSOLETE BY THE TIME THEY ARE INSTALLED.
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DCI EXEC REG

FORM 1-79 610 USE PREVIOUS EDITIONS

ER

SECRET

19 September 1984

MEMORANDUM FOR: Director of Central Intelligence

VIA: Deputy Director of Central Intelligence

FROM: Executive Director

SUBJECT: Computerization

1. Recently you sent me a note on computerization. This is a subject of intense interest to me, not because I'm especially interested in computers but because the future quality of our work will increasingly be tied to our success in harnessing the computer. What follows is a short summary of my present thinking on the issues you raised.

2. Senior management concern about this issue isn't new; we have even made some progress over the years in the way we bring computer-related issues to senior levels for resolution, in educating our senior managers about these issues (although it is often the case that as soon as someone gets educated he leaves), and in encouraging information sharing among CIA components. We have also had some tentative, but obviously not decisive, discussions of alternative approaches to the management of information systems.

3. One approach to thinking about this problem was the result of some strategizing between Jack Blake, then DDA, and myself when I was Comptroller; this eventually resulted in the hiring of an information architect. After approximately a year's work, the position of Information Architect was abolished and replaced by an Information Systems Board to deal with many of the same questions.

4. Despite this and other similar kinds of experiences over the years, there has never developed a senior management concensus about what ought to be done about the information systems management issue. Indeed some people question whether anything ought to be done at senior management levels other than support what is conceived at lower levels.

5. Over the years, much of the hassle has been caused by changing technology. First, there was the mainframe mentality pushed by IBM, which insisted that large data processing departments full of white-coated specialists make all the decisions. The users of such systems played second fiddle. Indeed, the device given the user for communicating to the mainframe system--the dumb terminal--said it all. Then came the

C-106

miniturization of electronics, and a new role for users who were also becoming increasingly sophisticated as they sought to deal with technical data processing specialists. Minicomputers were used to act as "friendly interfaces" to large mainframe systems, helping users to use systems only data processing specialists had previously been able to understand. Then even the minicomputers got smaller and became microprocessors--small computers as powerful as the older mainframes but now imbedded in "intelligent terminals" and "personal computers" (PCs). Now the terminals themselves can help users use complex mainframe systems and, in addition, can do some data processing, i.e., simple analysis, word processing, and graphics.

6. Because these smart terminals, minicomputer based systems, and the old standby mainframe based systems are used for different purposes, they contain different parts of our collective information base and are used by different groups in the organization. Over time these different groups have found they need to communicate with one another and share their information. Thus, networking emerged--a way of letting all the different users of all the different systems talk to one another and share data. We would be in clover except for two tiny problems: the technological complexity of networking, and the relative security issues. Networking everybody's system and data together is not good security. Compartmentation is virtually impossible and a really smart computer "hacker" can get his hands on anything he wants to.

7. We and industry continue the search for compatible hardware and software to make networking easier without denying users capabilities they believe they need. No one vendor builds a system that will do everything for everybody, and talk to all the other pieces of equipment that are around. Everybody is coping in different ways. We have coped more successfully than many, but not without much gnashing of teeth.

8. In the course of trying to explain to you what I was doing on this topic some weeks ago, you expressed the view that maybe what was required was a "point of view" about the role of computers in our profession. I agree. An agreed set of objectives, almost a philosophical statement of where we want to go, is essential. Such a statement might include points like the following:

- We need to bring artificial intelligence techniques to bear as rapidly as feasible on our problems, with priority (for example) to helping the DI better integrate intellience information and the DO recruit agents

- We need to make decisions about who will have access to new databases before procurement decisions are made, so that databases can be designed to meet everyone's needs in the first instance. Security, customer needs, and other related issues must be systematicallv considered.

related issues must be systematically considered.

- It is important to equip smart ADP-wise new employees with the computer-based tools they will need to do their jobs in the future, both to get our work done and to enhance our ability to hire and retain the kinds of people we need.

- We need to limit the number of different vendors who will develop or build equipment in our facilities, both to reduce costs and improve security.

- We want to hold components to some database size constraints in order to slow today's cycle in which we design new systems, move people out of our building to accommodate the new systems, and then try to bring the people back. (The storage devices which hold computer-based information occupy nearly one-half of all the physical space we devote to computers.)

9. In addition to a set of objectives, or as part of it, we need a constitution, something which outlines what we expect to occur at the component level, what is properly done at a directorate level, and what should be considered centrally. Some of the issues for such a document include:

- at what level in the organization we should encourage a serious planning effort;

- who can conduct R&D on artificial intelligence applications;

- who will manage certain services of common concern;

- which components are competent to oversee the development by new contractors of future capabilities and which should be required to use a service of common concern.

10. Finally, we need a sensible process which brings certain information systems management issues to senior management attention. Now, senior management review of our programs mostly occur as part of the budget process. One can quarrel with how well we deal with these decisions but, in principle, the budget process is a sensible place for priorities to be sorted. It is not an adequate vehicle, however, for a discussion of our overall objectives or for consideration of issues of compatibility between systems.

11. The steps enumerated above are important, but just as important as taking a series of procedural steps is finding a way to exert some discreet 7th floor leadership on these issues. We need to involve the DD's even more directly in this problem than we have to date. You recently expressed interest in the AIM

system. Bob and Evan are using it, Harry has a terminal though I don't believe uses it very often, and Clair isn't even this far along (yet)! I have just taken steps, with ODP's help, to link together electronically certain of our senior people--including
25X1 the four deputies, [redacted] and Chuck Briggs. This is a start toward involving more of our senior people in the use of EDP tools. I am confident that with this involvement will come pressures downward for compatibility and for access to databases; in short, leadership.

12. As a footnote, we have a few advocates of organizational change to enable us to deal better with information management issues. Some favor creation of a fifth directorate--generally conceived as an amalgam of the Office of Data Processing and the Office of Communications. This approach, however, I think puts the cart before the horse. It seems to me that significant organizational change should follow conscious decisions about what we want to do, not the reverse.

13. Taking advantage of our past experience, I am working to pull together proposals in each of the areas mentioned above for further consideration and action. I hope to have this done in relatively short order. You quite rightly stressed in your note the need for senior management involvement. I am equally anxious to avoid the mistakes I and others have made in dealing with these issues in the past. I am confident that if we can engage the Deputy Directors at the right level, a level which matches their understanding of their organizations and their problems, we can successfully fashion effective tools to help us deal with the difficult management issues we will continue to face as computers become an ever more integral part of our profession.

25X1 [redacted]

James H. Taylor

ORIG: ExDir/JT:smg (9-19-84)
Distribution:
Orig - addse
1 - ExDir
1 - ER

CONFIDENTIAL

ER 84-9020

13 SEP 1984

AH. ER84-8071

NOTE FOR: Associate Deputy Director for Intelligence
Associate Deputy Director for Operations

FROM: Executive Director

SUBJECT: Computer-Assisted Dissemination
25X1 of Sensitive Intelligence [redacted]

I would like to meet briefly with you to discuss the DCI's suggestion to the DO for a computer system to disseminate selected sensitive intelligence reports to senior policymakers. Before we ask our ADP, communications, and security experts what is possible, I think we need to agree among ourselves on what, if anything, we want to do and then proceed to do it together. Some of the issues we need to resolve include:

- What intelligence should the system handle -- "Exclusive For," individual NID and PDB articles, "blue stripes?"

- How many senior customers will it serve and where are they located? Should they have terminals only in their offices? Will portable terminals with encrypted communications be necessary?

- What capabilities will the system offer -- text only or the full range of graphics, maps, and photographs? Will customers be able to ask questions?

- Will password protection of the system be adequate (some customers might be tempted to give their passwords to assistants or leave the terminal unattended once logged on) or will some more advanced access mechanism be needed?

- How much are we willing to spend for such a system?
25X1 When do we want to make it available to our customers? [redacted]

My secretary will arrange an early, mutually convenient meeting. I want to get a quick sense of where we should be going
25X1 and start the technical experts working as soon as possible. [redacted]
25X1

[redacted]

James H. Taylor

DCI EXEC REG

Distribution:
25X1 [redacted]
1 - ADDI
1 - ADDO
1 - ExDir
1 - ER
1 - PS
RDONAHEY/JAL 13 SEP 1984 CONFIDENTIAL

EXECUTIVE SECRETARIAT

ROUTING SLIP

TO:		ACTION	INFO	DATE	INITIAL
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2	DDCI		X		
3	EXDIR	X			
4	D/ICS		X		
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6	DDA		X		
7	DDO		X		
8	DDS&T		X		
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12	Compt				
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	SUSPENSE		Date		

Remarks

STAT

Executive Secretary

6 September 1984

Date

3637 (10-81)

6 September 1984

MEMORANDUM FOR: Executive Director

FROM: Director of Central Intelligence

SUBJECT: Computerization

1. Some weeks ago, I was concerned with the problems we were having with the breakdown of the WANGs to the extent that I called Dr. Wang to have him straighten it out and he sent a team out to look into it. I am concerned that there are more fundamental problems in the way we have been approaching computerization, particularly with each Directorate selecting its own system. This results in a DI analyst being unable to communicate through his terminal with a DO reports officer, data bases which cannot be used interchangeably with different terminals and in connection with one another, inability to use Community data bases on-line in other than the originating agencies, etc.

2. I'd like to understand the role of the information handling architect, the Information Handling Committee, the data processing unit in DIA, and their respective effectiveness. Above all, where and how should we be going from here. I'd like to work out a comprehensive and speedy method of assessing this and charting directions. As a first step, we should make sure that senior management is on top of this problem and prepared to develop a coordinated strategy and head the Agency as a whole in a new direction, while taking into account the specialized needs of each component.

3. One reason for addressing this promptly is the large investment that the new building will require in additional and relocated communications and computer commitments.

William J. Casey

25X1

SECRET